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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/446,545	03/16/2001	Juergen Kockmann	P99,2690	2480

29177 7590 07/13/2004

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CHICAGO, IL 60690-1135

EXAMINER

HYUN, SOON D

ART UNIT	PAPER NUMBER
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2663

21

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/446,545

Applicant(s)

KOCKMANN ET AL.

Examiner

Soon D Hyun

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-19 is/are allowed.
- 6) ☒ Claim(s) 11-13 and 15 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 11 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Rohani et al (U.S. Patent No. 5,390,166).

Regarding claim 11, Rohani et al (Rohani) discloses a method for digital radio transmission of data between a fixed station (14) and at least one mobile station (17) at one of a number of carrier frequencies, the method comprising the steps of:

transmitting data in a number of time slots (41 of each frame in FIG. 4) using a time-division multiplex method (col. 2, lines 4-9), the data being transmitted in active time slots (41 of each frame) each of which is followed by an inactive time slot (42) in which no data is transmitted, the inactive time slot having a time duration shorter than a time duration of an active time slot (col. 4, lines 13-17); and

changing from a first carrier frequency to a second carrier frequency after a predetermined time period having an order of magnitude of one time slot, wherein change from the first carrier frequency to the second carrier frequency is performed during the inactive time slot by a RF module (Frequency Synthesizer 21).

Regarding claim 13, Rohani further discloses that the data is transmitted using a time-division multiplex duplex method, see FIG. 4

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rohani et al (U.S. Patent No. 5,390,166)..

Regarding claim 12, refer to the discussion for claim 11. However, Rohani et al (Rohani) does not explicitly teach that a time duration of the inactive time slot is half of the active time slot. With reference to the col. 4, lines 13-18, slot 42 and slot 43 could be combined in one time slot. Therefore, it would have been obvious to one having ordinary skill in the art to incorporate an inactive time slot having half-time duration as claimed without deviating from the broad principle and spirit of the present invention of Rohani.

Art Unit: 2663

Regarding claim 15, Rohani does not explicitly teach that the data is transmitted in a 2.4 GHz band. It would have been obvious to one having ordinary skill in the art to incorporate the method of Rohani into 2.4 GHz band to use for ISM band without deviating from the broad principle and spirit of the present invention of Rohani.

Allowable Subject Matter

6. Claims 16-19 are allowed.
7. Claims 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments filed 04/19/2004 have been fully considered but they are not persuasive.

Applicant argues that the reference (Rohani) does not teach an inactive time slot having a time duration shorter than a time duration of active time slot. Examiner disagrees. With reference to the col. 4, lines 13-17, the reference clearly teaches that "it should be understood that the subscriber may not require a full time slot in which to change frequencies."

Applicant further argues that Rohani does not teach "transmitting data in a number of time slots using a time-division multiplex method." Examiner disagrees.

Art Unit: 2663

With reference to col. 2, lines 4-12, the method is based on TDMA, and with reference to FIG. 4 and col. 4, lines 11-13, the subscriber transmit data in the time slot 41 (a first time slot) and a second time slot following the slot 48, i.e., transmitting data in a number of time slots even though the second slot belongs to another frame.

Therefore, Rohani teaches "transmitting data in a number of time slots using a time-division multiplex method."

For the reasons as discussed above, Examiner believes that the claim rejection is proper.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Soon-Dong Hyun whose telephone number is (703)

Art Unit: 2663

305-4550. The examiner can normally be reached on Monday-Friday from 8:30 A.M. to 5:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen, can be reached on (703) 308-5340.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

11. Any response to this final action should be mailed to:

Box AF

Commissioner for Patents

P.O. Box 1450

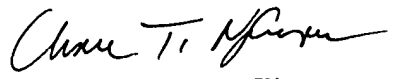
Alexandria, VA 22313-1450

Or faxed to: 703-872-9314 for formal communications intended for entry



S. Hyun

07/08/2004



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